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Amendments to the Claims

The following listing of the claims will replace all prior versions, and listings of the claims in the application:

Listing of Claims

1-2. (Canceled)

3. (Previously presented) An optical disc drive for reading data from an optical disc and/or writing data on an optical disc having an information storage layer, comprising:

a light source;

a collector optics for focusing light from the light source;

a light-receiving section for receiving a peripheral part of the light reflected by the information storage layer to generate a first detection signal and for receiving a non-peripheral part of the light to generate a second detection signal;

a first focus signal generating section for generating a first focus signal based on the first detection signal according to a focusing state of the light in the peripheral part;

a second focus signal generating section for generating a second focus signal based on the second detection signal according to a focusing state of the light in the non-peripheral part;

a first light quantity generating section for generating a first light quantity signal based on the first detection signal according to a total light quantity of the peripheral part;

a second light quantity generating section for generating a second light quantity signal based on the second detection signal according to a total light quantity of the non-peripheral part;

a first normalizing section for generating a first normalized signal by normalizing the first focus signal based on the first light quantity signal;

a second normalizing section for generating a second normalized signal by normalizing the second focus signal based on the second light quantity signal; and

a detecting section for generating a spherical aberration signal based on the first normalized signal and the second normalized signal according to a quantity of spherical aberration produced at a focusing position of the light, wherein the detecting section calculates a difference between the first normalized signal and the second normalized signal to generate the

spherical aberration signal.

4-11. (Canceled)

12. (Previously presented) An optical disc drive for reading data from an optical disc and/or writing data on an optical disc having an information storage layer, comprising:

a light source;

a collector optics for focusing light from the light source;

a light-receiving section for receiving the light reflected by the information storage layer to generate a detection signal;

a spherical aberration detecting section for generating a spherical aberration signal based on the detection signal according to a quantity of spherical aberration produced at a focusing position of the light;

a light quantity detecting section for generating a light quantity signal based on the detection signal according to a total quantity of the light; and

a normalized aberration detecting section for normalizing the spherical aberration signal based on the light quantity signal to generate a normalized spherical aberration signal.

13. (Previously presented) The optical disc drive according to claim 12, wherein the light-receiving section has light-receiving elements including a first light-receiving element and a second light-receiving element, and wherein, in receipt of the light, the first light-receiving element receives a peripheral part of the light reflected by the information storage layer and the second light-receiving element receives a non-peripheral part of the light, and as a result of the reception, at least one of a first detection signal generated in the first light-receiving element and a second detection signal generated in the second light-receiving element is outputted to the light quantity detecting section.

14. (Previously presented) The optical disc drive according to claim 13, wherein the light-receiving section further includes a third light-receiving element for receiving

an entire light to generate a third detection signal, and wherein the light-receiving section outputs at least one of a first detection signal generated in the first light-receiving element and a second detection signal generated in the second light-receiving element and the third detection signal to the light quantity detecting section.

15. (Original) The optical disc drive according to claim 13, wherein each of the light-receiving elements generates a detection signal having a signal level according to received light quantity, and wherein the light-receiving section outputs one of the detection signals having a maximum signal level to the light quantity detecting section.

16-17. (Canceled)

18. (Previously presented) A method for reading data from an optical disc and/or writing data on an optical disc having an information storage layer, comprising steps of:
focusing light from a light source;
receiving the light reflected by the information storage layer to generate a detection signal;
generating a spherical aberration signal based on the detection signal according to a quantity of spherical aberration produced at a focusing position of the light;
generating a light quantity signal based on the detection signal according to a total quantity of the light; and
normalizing the spherical aberration signal based on the light quantity signal to generate a normalized spherical aberration signal.

19-20. (Canceled)